

**Agenda Materials
Community and Technical Colleges
Formula Advisory Committee (CTCFAC)
for the 2020-2021 Biennial
Appropriations**

November 2017

Table of Contents

Contents

Agenda	2
Prior Meeting’s Draft Minutes	3
Commissioner’s Charges	5
Community and Technical College Formula Advisory Committee for 2020-2021 Biennium.....	6
Charge 1 – Study and make recommendation for the appropriate funding levels for the contact hour, core, and the student success funding.	7
Charge 2 – Study and make recommendations for the appropriate funding level for, and the refinement of, Texas State Technical College System’s returned value funding formula (General Appropriations Act, SB 1, 85th Texas Legislature, Rider 11 (page III-232).	7
Charge 3 – Study and make recommendations on the treatment of competency-based courses in formula allocations.....	7
Charge 4 – Study and make recommendations on the efficacy of critical need fields as they relate to contact hour and success point funding.....	8
Charge 5 – Study and make recommendations on a new formula to fund dual credit programs based upon the number of semester credit hours offered in dual credit by Texas State Technical College. (General Appropriations Act, SB 1, 85th Texas Legislature, Rider 12 (page III-232))	22
Charge 6 – Review existing Coordinating Board data on dual credit program funding, including preliminary data available from the 2017-2018 dual credit study being conducted by contracted research organizations, and share insight on current dual credit funding mechanisms.....	23

Agenda

**Meeting of the
Community and Technical Colleges Formula Advisory Committee
Texas Higher Education Coordinating Board
Board Room, First Floor, 1.170
1200 East Anderson Lane, Austin
Thursday, November 9, 2017
1:00 p.m.**

Agenda

- I. Call to Order
- II. Consideration and approval of the minutes from October 12, 2017, meeting
- III. Discussion, review, and consideration of the Commissioner's 2020-2021 Biennium charges
- IV. Planning for subsequent meetings
- V. Adjournment

Prior Meeting's Draft Minutes

**Meeting of the Community and Technical Colleges Formula Advisory Committee
Texas Higher Education Coordinating Board
Board Room, First Floor, 1.170
1200 East Anderson Lane, Austin
Thursday, October 12, 2017
1:00 p.m.**

Minutes

Attendees: Dr. Van Miller, Mr. Patrick Lee, Mr. Richard Cervantes, Ms. Mary Wickland, Mr. Michael Reeser, Dr. Robert Riza, Dr. Jeremy McMillen, Dr. Ron Clinton and Dr. Phil Rhodes

Phone conference: Dr. Cesar Maldonado, Dr. Pamela Anglin and Mr. Jim Yeonopolus

Absent: Mr. Chet Lewis

THECB Staff: Mr. David Young, Mr. Thomas Keaton, Dr. Garry Tomerlin, Dr. Holly Kosiewicz, Dr. Jennifer Nailos, Mr. Roland Gilmore, Ms. Jennifer Gonzales

Legislative Budget Board: Ms. Emily Schmidt

1. The meeting was called to order at 1:00 p.m.
2. The chair asked if there were any corrections to the minutes of the September 21, 2017, meeting. Dr. Van Miller motioned for approval of the minutes. The motion was seconded by Dr. Ron Clinton and unanimously approved.
3. Discussion of Charge 1 – Study and make recommendations for the appropriate funding levels for the core, contact hour and student success funding.
 - I. Ms. Wickland said the work group is continuing to review.
 - II. Dr. Tomerlin spoke on the status of the current list of Fields of Study and fielded questions.
 - III. Dr. McMillen inquired as to how often the Fields of Study would be refreshed. Dr. Tomerlin said the current Fields of Study would be reviewed on a periodic basis, keeping them current and relevant.
4. Discussion of Charge 6 – Review existing Coordinating Board data on dual credit program funding, including preliminary data available from the 2017-2018 dual credit study being conducted by contracted research organizations, and share insight on current dual credit funding mechanisms.
 1. Dr. McMillen said the work group has met and is still reviewing.
 2. Dr. Holly Kosiewicz presented on the THECB/Rand, AIR Study on Dual Credit Education in Texas.

3. Mr. Reeser asked if the research team would differentiate between academic and technical courses when it reviews costs. Ms. Kosiewicz said technical courses comprise less than ten percent of dual credit hours; therefore the focus would be on academic courses.
5. Discussion of Charge 3 – Study and make recommendations on the treatment of competency-based courses in formula allocations.
 1. Mr. Yeonopolus did not have a work group update.
 2. Dr. Jennifer Nailos presented on competency based education.
6. Discussion of Charge 4 – Study and make recommendations on the efficacy of critical need fields as they relate to contact hour and success point funding.
 - I. Ms. Wickland said the work group met and had a good discussion. It will continue its review.
7. Discussion of Charge 5 – Study and make recommendations on a new formula to fund dual credit programs based upon the number of semester credit hours offered in dual credit by Texas State Technical College. (General Appropriations Act, SB 1, 85th Texas Legislature, Rider 12 (page III-232))
 - I. Dr. McMillen did not have a work group update.
8. Discussion of Charge 2 – Study and make recommendations for the appropriate funding level for, and the refinement of, Texas State Technical College System’s returned value funding formula.
 1. Mr. Reeser said work the group is reviewing information he distributed and plans to have a recommendation soon.
9. The vice chair recommended the work groups finalize their recommendations for final discussion and approval by the full committee.

The vice chair asked for a motion to adjourn. Ms. Mary Wickland made the motion, the motion was seconded by Mr. Richard Cervantes. The committee adjourned at 2:10 p.m. and will next convene November 9th, 2017, at 1:00 p. m.

Prepared by Roland Gilmore

Commissioner's Charges

The Community and Technical College Formula Advisory Committee (CTCFAC), conducted in an open and public forum, is charged with proposing a set of formulas that provide the appropriate funding levels and financial incentives necessary to best achieve the goals of *60x30TX*. A preliminary written report of its activities and recommendations is due to the Commissioner by December 7, 2017, and a final written report by February 2, 2018. The CTCFAC's specific charges are to:

1. Study and make recommendations for the appropriate funding levels for the contact hour, core, and the student success funding. (TEC, Section 61.059 (b)).

"The board shall devise, establish, and periodically review and revise formulas for the use of the governor and the Legislative Budget Board in making appropriations recommendations to the legislature for all institutions of higher education, including the funding of postsecondary vocational-technical programs. As a specific element of the periodic review, the board shall study and recommend changes in the funding formulas based on the role and mission statements of institutions of higher education. In carrying out its duties under this section, the board shall employ an ongoing process of committee review and expert testimony and analysis."

2. Study and make recommendations for the appropriate funding level for, and the refinement of, Texas State Technical College System's returned value funding formula (General Appropriations Act, SB 1, 85th Texas Legislature, Rider 11 (page III-232)).

"The Texas State Technical College System shall continue to work with the Texas Higher Education Coordinating Board, the Legislative Budget Board and other relevant agencies to refine the new Returned Value Funding Formula for the TSTCs. It is the intent of the Legislature that recommended adjustments to the formula shall be ready for implementation in the 2020-21 biennium and shall further the goal of rewarding job placement and graduate earnings projections, not time in training or contact hours."

3. Study and make recommendations on the treatment of competency-based courses in formula allocations.
4. Study and make recommendations on the efficacy of critical need fields as they relate to contact hour and success point funding.
5. Study and make recommendations on a new formula to fund dual credit programs based upon the number of semester credit hours offered in dual credit by Texas State Technical College. (General Appropriations Act, SB 1, 85th Texas Legislature, Rider 12 (page III-232)).
6. Review existing Coordinating Board data on dual credit program funding, including preliminary data available from the 2017-2018 dual credit study being conducted by contracted research organizations, and share insight on current dual credit funding mechanisms.

Below is a link to the Rand Report on Dual Credit

[Dual Credit: Interim Report from THECB-RAND Study Posted for Public Comment](#)

Community and Technical College Formula Advisory Committee for 2020-2021 Biennium

Dr. Pamela Anglin, Chair

Name/Title	Institution/Address	Email/Phone
<u>Institution Representatives:</u>		
Ms. Teri Crawford (2022) Vice Chancellor of Public Relations, Marketing, and Governmental Affairs	San Jacinto College District 4624 Fairmont Parkway Suite 200 Pasadena, TX 77504	teri.crawford@sjcd.edu (281) 998-6151
Dr. Cesar Maldonado, Ph.D., P.E. (2022) Chancellor	Houston Community College 3100 main Houston, Texas 77002	cesar.maldonado@hccs.edu (713) 718-5059
Dr. Van Miller (2022) Vice President for Administrative Services and CFO	Temple College 2600 South First Street Temple, Texas 76504	van.miller@templeic.edu (254) 298-8606
Mr. Patrick Lee (2022) Department Chair and Professor of Mathematics	Alamo Colleges 1400 West Villaret Boulevard San Antonio, Texas 78224	plee18@alamo.edu (210) 486-3282
Mr. Richard Cervantes (2022) Vice President for Business and Finance	Blinn College 902 College Avenue Brenham, Texas 77833	Richard.Cervantes@blinn.edu (979) 830-4123
Ms. Mary Wickland (2020) Vice President for Finance	Lamar State College - Port Arthur PO Box 310 Port Arthur, TX 77641	wicklandma@lamarpa.edu (409) 984-6125
Mr. Jim Yeonopolus (2022) Chancellor	Central Texas College PO Box 1800 Killeen, TX 76540	JYeonopolus@ctcd.edu (254) 526-1214
Mr. Michael Reeser (2020) Chancellor	Texas State Technical College System 3801 Campus Drive Waco, Texas 76705	mike.reeser@tstc.edu (254) 867-4891
Dr. Robert K. Riza (2022) President	Clarendon College 1122 College Drive Clarendon, TX 79226	robert.riza@clarendoncollege.edu (806) 874-4808
Dr. Pamela Anglin (2020) President	Paris Junior College 2400 Clarksville Street Paris, TX 75460	panglin@parisjc.edu (903) 782-0330
Dr. Ron Clinton (2018) Interim President	Northeast Texas Community College PO Box 1307 Mount Pleasant, TX 75456	rclinton@ntcc.edu (903) 434-8101
Dr. Jeremy McMillen (2020) President	Grayson College 6101 Grayson Drive Denison, TX 75020	mcmillenj@grayson.edu (903) 463-8600
Dr. Phil Rhodes (2020) Vice President - Research, Effectiveness, and Information Technology	McLennan Community College 1400 College Drive, Admin. 410 Waco, TX 76708	prhodes@mcLennan.edu (254) 299-8642

Charge 1 – Study and make recommendation for the appropriate funding levels for the contact hour, core, and the student success funding.

No recommendation at this time.

Charge 2 – Study and make recommendations for the appropriate funding level for, and the refinement of, Texas State Technical College System’s returned value funding formula (General Appropriations Act, SB 1, 85th Texas Legislature, Rider 11 (page III-232)).

No recommendation at this time.

Charge 3 – Study and make recommendations on the treatment of competency-based courses in formula allocations.

No recommendation at this time.

Charge 4 – Study and make recommendations on the efficacy of critical need fields as they relate to contact hour and success point funding.

No recommendation at this time.

Current Critical Fields in Success Points (SP) and Formula Funding (FF)												
CIP	CIP Program Name	SP	FF	Associate Degree Level			All Degree Levels					
				2016 Supply (program completions)	2016 Demand (annual openings)	% Growth (2015-2024)	2016 Supply (program completions)	2016 Demand (annual openings)	% Growth (2015-2024)	Avg Wages	Avg Monthly Postings (Jan 2012-Sep 2017)	Avg Monthly Hires (Jan 2012-Sep 2017)
11	COMPUTER AND INFORMATION SCIENCES AND SUPPORT SERVICES	X	X	1,931	5,304	21.1%	12,720	50,540	22.0%	\$35.90	44,429	20,173
13	EDUCATION		X	2,547	6,141	19.5%	14,971	99,138	18.2%	\$23.74	7,621	29,438
14	ENGINEERING	X	X	543	2,408	16.4%	13,943	42,247	16.7%	\$43.05	28,442	16,511
15	ENGINEERING TECHNOLOGIES AND ENGINEERING-RELATED FIELDS	X	X	2,727	6,707	8.2%	8,489	74,159	10.6%	\$27.06	23,822	30,231
26	BIOLOGICAL AND BIOMEDICAL SCIENCES		X	1,172	842	21.7%	10,444	21,413	20.8%	\$37.47	17,205	7,620
27	MATHEMATICS AND STATISTICS	X	X	351	415	18.1%	2,552	15,952	18.3%	\$32.58	4,414	5,090
30.01	Biological and Physical Sciences	X	X	307	5	17.4%	385	212	16.8%	\$53.01	497	73

Current Critical Fields in Success Points (SP) and Formula Funding (FF)

CIP	CIP Program Name	SP	FF	Associate Degree Level			All Degree Levels					
				2016 Supply (program completions)	2016 Demand (annual openings)	% Growth (2015-2024)	2016 Supply (program completions)	2016 Demand (annual openings)	% Growth (2015-2024)	Avg Wages	Avg Monthly Postings (Jan 2012-Sep 2017)	Avg Monthly Hires (Jan 2012-Sep 2017)
32.0104	Developmental/Remedial Mathematics		X	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
40	PHYSICAL SCIENCES	X	X	200	374	15.2%	3,181	15,327	15.5%	\$34.32	4,195	4,762
51.00	Health Services/Allied Health/Health Sciences, General		X	303	22,230	27.0%	1,613	109,966	26.9%	\$22.17	61,601	46,817
51.02	Communication Disorders Sciences and Services	X	X	0	14	26.8%	1,812	1,326	25.5%	\$35.39	2,020	550
51.06	Dental Support Services and Allied Professions	X	X	457	1,615	32.8%	3,289	7,153	29.8%	\$24.22	1,028	2,763
51.07	Health and Medical Administrative Services	X	X	795	10,956	21.9%	5,048	78,113	21.0%	\$20.78	32,349	27,798
51.08	Allied Health and Medical Assisting Services	X	X	1720	6001	30.3%	11931	24447	28.6%	\$15.67	9,766	8,624

Current Critical Fields in Success Points (SP) and Formula Funding (FF)

CIP	CIP Program Name	SP	FF	Associate Degree Level			All Degree Levels					
				2016 Supply (program completions)	2016 Demand (annual openings)	% Growth (2015-2024)	2016 Supply (program completions)	2016 Demand (annual openings)	% Growth (2015-2024)	Avg Wages	Avg Monthly Postings (Jan 2012-Sep 2017)	Avg Monthly Hires (Jan 2012-Sep 2017)
51.09	Allied Health Diagnostic, Intervention, and Treatment Professions	X	X	2,394	2,644	24.6%	6,308	9,358	26.4%	\$24.81	7,766	3,823
51.10	Clinical/Medical Laboratory Science/Research and Allied Professions	X	X	451	1,090	27.6%	1,138	6,686	27.9%	\$19.66	4,206	2,219
51.16	[Deleted, use 51.38 or 51.39]	X	X	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
51.18	Ophthalmic and Optometric Support Services and Allied Professions	X	X	13	2,400	30.8%	60	11,200	31.0%	\$14.67	2,788	3,315
51.23	Rehabilitation and Therapeutic Professions	X	X	11	527	22.8%	1,652	15,640	20.0%	\$33.47	7,756	5,458
51.26	Health Aides/Attendants/Orderlies	X	X	0	7,423	31.4%	197	78,581	31.2%	\$9.29	4,786	29,216

Current Critical Fields in Success Points (SP) and Formula Funding (FF)

CIP	CIP Program Name	SP	FF	Associate Degree Level			All Degree Levels					
				2016 Supply (program completions)	2016 Demand (annual openings)	% Growth (2015-2024)	2016 Supply (program completions)	2016 Demand (annual openings)	% Growth (2015-2024)	Avg Wages	Avg Monthly Postings (Jan 2012-Sep 2017)	Avg Monthly Hires (Jan 2012-Sep 2017)
51.27	Medical Illustration and Informatics (FF includes 51.2703: Medical Illustration/Medical Illustrator but not Medical Informatics)	X	X	0	613	22.6%	43	9,073	25.2%	\$46.64	13,450	3,755
51.31	Dietetics and Clinical Nutrition Services	X		7	78	20.1%	245	729	22.0%	\$22.31	484	352
51.32	Bioethics/Medical Ethics	X		0	25	14.4%	3	5,619	15.3%	\$56.57	3,273	2,407
51.33	Alternative and Complementary Medicine and Medical Systems	X		0	19	27.8%	90	317	25.7%	\$28.47	40	109
51.34	Alternative and Complementary Medical Support Services	X		0	5	22.6%	0	168	22.1%	\$30.65	32	50
51.38	Registered Nursing, Nursing Administration, Nursing Research and Clinical Nursing	X	X	5,791	7,555	25.6%	18,849	35,371	23.6%	\$34.10	35,915	14,145

Current Critical Fields in Success Points (SP) and Formula Funding (FF)

CIP	CIP Program Name	S P	FF	Associate Degree Level			All Degree Levels					
				2016 Supply (program completions)	2016 Demand (annual openings)	% Growth (2015-2024)	2016 Supply (program completions)	2016 Demand (annual openings)	% Growth (2015-2024)	Avg Wages	Avg Monthly Postings (Jan 2012-Sep 2017)	Avg Monthly Hires (Jan 2012-Sep 2017)
51.39	Practical Nursing, Vocational Nursing and Nursing Assistants	X	X	3	9,673	25.0%	5,321	40,395	24.4%	\$25.73	29,673	19,718
51.99	[Deleted]	X	X	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
51.150 1	Substance Abuse/Addiction Counseling		X	178	89	32.7%	426	1,646	32.8%	\$20.30	340	450
51.150 2	Psychiatric/Mental Health Services Technician		X	141	263	8.1%	303	2,320	7.5%	\$12.32	801	668

Data sources: Economic Modeling Specialists International (EMSI) via Integrated Postsecondary Education Data System (IPEDS), Texas Workforce Commission (TWC), Occupational Employment Statistics (OES), American Community Survey (ACS), Job posting data is from Career builder and other job websites collected by EMSI

Largest Growth Occupations (requiring postsecondary non-degree award or associate degree)

Occupation	2015 Jobs	2024 Jobs	Change in Jobs (2015-2024)	% Change	2016 Median Hourly Earnings	2016 Degree Completions	2016 Openings
Heavy and Tractor-Trailer Truck Drivers	207,307	236,673	29,366	14%	\$18.63	316	28,023
Nursing Assistants	90,449	112,127	21,677	24%	\$11.52	1,923	14,105
Licensed Practical and Licensed Vocational Nurses	71,816	87,113	15,297	21%	\$21.73	4,508	6,649
Automotive Service Technicians and Mechanics	62,748	73,034	10,287	16%	\$14.79	3,734	7,547
Medical Assistants	56,658	73,725	17,066	30%	\$14.24	13,433	9,065
Hairdressers, Hairstylists, and Cosmetologists	50,274	60,412	10,139	20%	\$11.83	5,625	8,213
Preschool Teachers, Except Special Education	35,233	41,118	5,885	17%	\$13.10	3,310	4,294
Dental Assistants	27,555	36,119	8,564	31%	\$16.78	3,456	4,510
Firefighters	27,250	31,152	3,902	14%	\$24.11	1,048	2,411
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	27,202	33,568	6,366	23%	\$19.00	2,758	3,661
Telecommunications Equipment Installers and Repairers, Except Line Installers*	25,340	26,674	1,334	5%	\$21.44	12	2,781
Paralegals and Legal Assistants	22,390	26,464	4,074	18%	\$24.81	1,153	2,304
Computer Network Support Specialists	18,193	22,005	3,812	21%	\$32.83	4,015	1,902
Emergency Medical Technicians and Paramedics	17,994	23,457	5,463	30%	\$16.39	2,649	1,763
Medical Records and Health Information Technicians	16,971	21,338	4,367	26%	\$17.30	2,464	1,632
Aircraft Mechanics and Service Technicians*	16,687	17,242	555	3%	\$28.17	676	1,520
Electrical and Electronics Engineering Technicians*	15,806	16,450	644	4%	\$29.13	1,346	1,272
Radiologic Technologists	15,475	18,502	3,027	20%	\$26.77	2,345	1,293
Architectural and Civil Drafters*	12,746	12,692	(54)	0%	\$24.11	1,340	1,039
Dental Hygienists	12,328	16,670	4,342	35%	\$35.43	1,324	1,422

Data sources: Economic Modeling Specialists International (EMSI) via Integrated Postsecondary Education Data System (IPEDS), Texas Workforce Commission (TWC), Occupational Employment Statistics (OES), American Community Survey (ACS)

*Not on the fastest growing occupation list

Fastest Growing Occupations (requiring postsecondary non-degree award or associate degree)

Occupation	2015 Jobs	2024 Jobs	Change in Jobs (2015-2024)	% Change	2016 Median Hourly Earnings	2016 Degree Completions	2016 Openings
Heavy and Tractor-Trailer Truck Drivers	207,307	236,673	29,366	14%	\$18.63	316	28,023
Nursing Assistants	90,449	112,127	21,677	24%	\$11.52	1,923	14,105
Medical Assistants	56,658	73,725	17,066	30%	\$14.24	13,433	9,065
Licensed Practical and Licensed Vocational Nurses	71,816	87,113	15,297	21%	\$21.73	4,508	6,649
Automotive Service Technicians and Mechanics	62,748	73,034	10,287	16%	\$14.79	3,734	7,547
Hairdressers, Hairstylists, and Cosmetologists	50,274	60,412	10,139	20%	\$11.83	5,625	8,213
Dental Assistants	27,555	36,119	8,564	31%	\$16.78	3,456	4,510
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	27,202	33,568	6,366	23%	\$19.00	2,758	3,661
Preschool Teachers, Except Special Education	35,233	41,118	5,885	17%	\$13.10	3,310	4,294
Emergency Medical Technicians and Paramedics	17,994	23,457	5,463	30%	\$16.39	2,649	1,763
Medical Records and Health Information Technicians	16,971	21,338	4,367	26%	\$17.30	2,464	1,632
Dental Hygienists	12,328	16,670	4,342	35%	\$35.43	1,324	1,422
Paralegals and Legal Assistants	22,390	26,464	4,074	18%	\$24.81	1,153	2,304
Web Developers*	11,268	15,291	4,022	36%	\$27.46	10,854	1,475
Firefighters	27,250	31,152	3,902	14%	\$24.11	1,048	2,411
Computer Network Support Specialists	18,193	22,005	3,812	21%	\$32.83	4,015	1,902
Medical and Clinical Laboratory Technicians*	11,355	14,474	3,119	27%	\$18.26	1,390	1,093
Phlebotomists*	8,828	11,862	3,034	34%	\$14.71	76	1,386
Radiologic Technologists	15,475	18,502	3,027	20%	\$26.77	2,345	1,293
Massage Therapists*	11,994	15,014	3,020	25%	\$14.94	1,666	1,678

Data sources: Economic Modeling Specialists International (EMSI) via Integrated Postsecondary Education Data System (IPEDS), Texas Workforce Commission (TWC), Occupational Employment Statistics (OES), American Community Survey (ACS)

*Not on the largest occupation list

EMSI Largest and Fastest Growing Occupations: Associated Programs

SOC	SOC_Title	Largest Growth	Fastest Growing	TWC Hot Job	CIP	Program
15-1134	Web Developers		X		11.0101 11.0701 11.0901 14.0901 11.0201	Computer and Information Sciences, General Computer Science Computer Systems Networking and Telecommunications Computer Engineering, General Computer Programming/Programmer, General
15-1152	Computer Network Support Specialists	X	X		11.0701 11.0901 11.0201 11.1003 11.1002	Computer Science Computer Systems Networking and Telecommunications Computer Programming/Programmer, General Computer and Information Systems Security/Information Assurance System, Networking, and LAN/WAN Management/Manager
17-3011	Architectural and Civil Drafters	X			15.1301 15.1302 15.1303 04.0902 04.0901	Drafting and Design Technology/Technician, General CAD/CADD Drafting and/or Design Technology/Technician Architectural Drafting and Architectural CAD/CADD Architectural and Building Sciences/Technology Architectural Technology/Technician
17-3023	Electrical and Electronics Engineering Technicians	X			15.0303 15.1202 15.0000 15.1201 15.0305	Electrical, Electronic and Communications Engineering Technology/Technician Computer Technology/Computer Systems Technology Engineering Technology, General Computer Engineering Technology/Technician Telecommunications Technology/Technician
23-2011	Paralegals and Legal Assistants	X	X	X	22.0302 22.0399 22.0000	Legal Assistant/Paralegal Legal Support Services, Other Legal Studies, General
29-2021	Dental Hygienists	X	X		51.0000 51.0602 51.1101 51.0699	Health Services/Allied Health/Health Sciences, General Dental Hygiene/Hygienist Pre-Dentistry Studies Dental Services and Allied Professions, Other
29-2034	Radiologic Technologists	X	X	X	51.0911 51.0000 51.0907 51.0920 51.0919	Radiologic Technology/Science - Radiographer Health Services/Allied Health/Health Sciences, General Medical Radiologic Technology/Science - Radiation Therapist Magnetic Resonance Imaging (MRI) Technology/Technician Mammography Technician/Technology

EMSI Largest and Fastest Growing Occupations: Associated Programs

SOC	SOC Title	Largest Growth	Fastest Growing	TWC Hot Job	CIP	Program
29-2041	Emergency Medical Technicians and Paramedics	X	X		51.0904 51.0000	Emergency Medical Technology/Technician (EMT Paramedic) Health Services/Allied Health/Health Sciences, General
29-2061	Licensed Practical and Licensed Vocational Nurses	X	X	X	51.3901 51.0000 51.1105	Licensed Practical/Vocational Nurse Training Health Services/Allied Health/Health Sciences, General Pre-Nursing Studies
29-2071	Medical Records and Health Information Technicians	X	X		51.0713 51.0000 51.0707	Medical Insurance Coding Specialist/Coder Health Services/Allied Health/Health Sciences, General Health Information/Medical Records Technology/Technician
31-1014	Nursing Assistants	X	X		51.3902 51.0000 51.2601	Nursing Assistant/Aide and Patient Care Assistant/Aide Health Services/Allied Health/Health Sciences, General Health Aide
31-9092	Medical Assistants	X	X		51.0801 51.0713 51.0000 51.0710 51.0716	Medical/Clinical Assistant Medical Insurance Coding Specialist/Coder Health Services/Allied Health/Health Sciences, General Medical Office Assistant/Specialist Medical Administrative/Executive Assistant and Medical Secretary
25-2011	Preschool Teachers, Except Special Education	X	X		13.1210 19.0706 13.0101 19.0708 13.1207	Early Childhood Education and Teaching Child Development Education, General Child Care and Support Services Management Montessori Teacher Education
29-2011	Medical and Clinical Laboratory Technicians		X		51.0000 51.1004 51.0802 51.1008 51.1001	Health Services/Allied Health/Health Sciences, General Clinical/Medical Laboratory Technician Clinical/Medical Laboratory Assistant Histologic Technician Blood Bank Technology Specialist
31-9011	Massage Therapists		X		51.3501 51.0000	Massage Therapy/Therapeutic Massage Health Services/Allied Health/Health Sciences, General
31-9097	Phlebotomists		X		51.1009	Phlebotomy Technician/Phlebotomist

EMSI Largest and Fastest Growing Occupations: Associated Programs

SOC	SOC_Title	Largest Growth	Fastest Growing	TWC Hot Job	CIP	Program
31-9091	Dental Assistants	X	X	X	51.0601 51.0000 51.1101 51.0699	Dental Assisting/Assistant Health Services/Allied Health/Health Sciences, General Pre-Dentistry Studies Dental Services and Allied Professions, Other
33-2011	Firefighters	X	X		43.0203 03.0208	Fire Science/Fire-fighting Natural Resources Law Enforcement and Protective Services
39-5012	Hairdressers, Hairstylists, and Cosmetologists	X	X		12.0401 12.0413 12.0407 12.0406 12.0499	Cosmetology/Cosmetologist, General Cosmetology, Barber/Styling, and Nail Instructor Hair Styling/Stylist and Hair Design Make-Up Artist/Specialist Cosmetology and Related Personal Grooming Arts, Other
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	X			47.0103	Communications Systems Installation and Repair Technology
49-3011	Aircraft Mechanics and Service Technicians	X		X	47.0607 47.0608	Airframe Mechanics and Aircraft Maintenance Technology/Technician Aircraft Power plant Technology/Technician
49-3023	Automotive Service Technicians and Mechanics	X	X		47.0604 47.0613 15.0803	Automobile/Automotive Mechanics Technology/Technician Medium/Heavy Vehicle and Truck Technology/Technician Automotive Engineering Technology/Technician
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	X	X		47.0201 15.0501 15.0505	Heating, Air Conditioning, Ventilation and Refrigeration Maintenance Technology/Technician Heating, Ventilation, Air Conditioning and Refrigeration Engineering Technology/Technician Solar Energy Technology/Technician
53-3032	Heavy and Tractor-Trailer Truck Drivers	X	X		49.0205	Truck and Bus Driver/Commercial Vehicle Operator and Instructor

Source: EMSI

Red=In Formula Funding (FF) but not Success Points (SP) as a critical field

Purple=Not in FF or SP but not recommended as an addition to the critical fields list in formula funding

Green=Not in FF or SP and recommended as a potential addition to the critical fields list in formula funding

Black=Already considered a critical field in FF and SP

TWC Hot Jobs		
SOC	Level	SOC_Title
29-2061	Certificate	Licensed Practical and Licensed Vocational Nurses
31-9091	Certificate	Dental Assistants
49-3011	Certificate	Aircraft Mechanics and Service Technicians
17-3022	Associate	Civil Engineering Technicians
23-2011	Associate	Paralegals and Legal Assistants
25-2012	Associate	Kindergarten Teachers, Except Special Education
29-2034	Associate	Radiologic Technologists
11-2022	Baccalaureate	Sales Managers
11-9021	Baccalaureate	Construction Managers
11-9111	Baccalaureate	Medical and Health Services Managers
11-1021	Baccalaureate	General and Operations Managers
13-1121	Baccalaureate	Meeting, Convention, and Event Planners
13-2011	Baccalaureate	Accountants and Auditors
15-1121	Baccalaureate	Computer Systems Analysts
15-1132	Baccalaureate	Software Developers, Applications
15-1133	Baccalaureate	Software Developers, Systems Software
17-1021	Baccalaureate	Cartographers and Photogrammetrists
19-1012	Baccalaureate	Food Scientists and Technologists
27-3042	Baccalaureate	Technical Writers
41-3031	Baccalaureate	Securities, Commodities, and Financial Services Sales Agents
41-4011	Baccalaureate	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products
53-2011	Baccalaureate	Airline Pilots, Copilots, and Flight Engineers

TWC Hot Jobs: Associated Programs

SOC	Level	SOC Title	CIP	Program
13-2011	B	Accountants and Auditors	52.0301	Accounting
			52.1601	Taxation
			52.0305	Accounting and Business/Management
			52.0304	Accounting and Finance
			30.1601	Accounting and Computer Science
49-3011	C	Aircraft Mechanics and Service Technicians	47.0607	Airframe Mechanics and Aircraft
			47.0608	Aircraft Power plant Technology/Technician
53-2011	B	Airline Pilots, Copilots, and Flight Engineers	49.0102	Airline/Commercial/Professional Pilot and Flight Crew
17-1021	B	Cartographers and Photogrammetrists	45.0702	Geographic Information Science and Cartography
			15.1102	Surveying Technology/Surveying
17-3022	A	Civil Engineering Technicians	15.1001	Construction Engineering Technology/Technician
			15.0000	Engineering Technology, General
			15.0201	Civil Engineering Technology/Technician
			46.0415	Building Construction Technology
15-1121	B	Computer Systems Analysts	11.0101	Computer and Information Sciences, General
			11.0901	Computer Systems Networking and Telecommunications
			11.0103	Information Technology
			11.0501	Computer Systems Analysis/Analyst
11-9021	B	Construction Managers	52.0201	Business Administration and Management, General
			52.0101	Business/Commerce, General
			15.1001	Construction Engineering Technology/Technician
			52.0205	Operation Management and Supervision
			46.0000	Construction Trades, General
			52.2001	Construction Management
31-9091	C	Dental Assistants	51.0601	Dental Assisting/Assistant
			51.0000	Health Services/Allied Health/Health Sciences, General
			51.1101	Pre-Dentistry Studies
			51.0699	Dental Services and Allied Professions, Other

TWC Hot Jobs: Associated Programs

SOC	Level	SOC Title	CIP	Program
19-1012	B	Food Scientists and Technologists	01.0000 01.1001 12.0509	Agriculture, General Food Science Culinary Science, Culinology
11-1021	B	General and Operations Managers	52.0201 52.0101 44.0401 52.1101 52.0701 52.0212 31.0399	Business Administration and Management, General Business/Commerce, General Public Administration International Business/Trade/Commerce Entrepreneurship/Entrepreneurial Studies Retail Management Parks, Recreation and Leisure Facilities Management, Other
25-2012	A	Kindergarten Teachers, Except Special Education	13.1210 13.0101 13.1209	Early Childhood Education and Teaching Education, General Kindergarten/Preschool Education and Teaching
29-2061	C	Licensed Practical and Licensed Vocational Nurses	51.3901 51.0000 51.1105	Licensed Practical/Vocational Nurse Training Health Services/Allied Health/Health Sciences, General Pre-Nursing Studies
11-9111	B	Medical and Health Services Managers	51.0701 51.2201 51.3802 51.0702 51.3818 51.0706 51.0799 51.2211 51.0718 51.0719 51.2208 51.0717 44.0503	Health/Health Care Administration/Management Public Health, General Nursing Administration Hospital and Health Care Facilities Administration/Management Nursing Practice Health Information/Medical Records Administration/Administrator Health and Medical Administrative Services, Other Health Services Administration Long Term Care Administration/Management Clinical Research Coordinator Community Health and Preventive Medicine Medical Staff Services Technology/Technician Health Policy Analysis

TWC Hot Jobs: Associated Programs

SOC	Level	SOC_Title	CIP	Program
13-1121	B	Meeting, Convention, and Event Planners	N/A	
23-2011	A	Paralegals and Legal Assistants	22.0302 22.0399 22.0000	Legal Assistant/Paralegal Legal Support Services, Other Legal Studies, General
29-2034	A	Radiologic Technologists	51.0911 51.0000 51.0907 51.0920 51.0919	Radiologic Technology/Science - Radiographer Health Services/Allied Health/Health Sciences, General Medical Radiologic Technology/Science - Radiation Therapist Magnetic Resonance Imaging (MRI) Technology/Technician Mammography Technician/Technology
11-2022	B	Sales Managers	52.0201 52.0101 52.1401 19.0203 52.1499	Business Administration and Management, General Business/Commerce, General Marketing/Marketing Management, General Consumer Merchandising/Retailing Management Marketing, Other
41-4011	B	Sales Representatives, Wholesale and Manufacturing, Technical and	52.9999	Business, Management, Marketing, and Related Support Services, Other
41-3031	B	Securities, Commodities, and Financial Services Sales Agents	52.0804	Financial Planning and Services
15-1132	B	Software Developers, Applications	11.0701 14.0901 11.0201 14.0903 11.0103 51.2706 11.0202 26.1103 11.0804	Computer Science Computer Engineering, General Computer Programming/Programmer, General Computer Software Engineering Information Technology Medical Informatics Computer Programming, Specific Applications Bioinformatics Modeling, Virtual Environments and Simulation

TWC Hot Jobs: Associated Programs

SOC	Level	SOC_Title	CIP	Program
15-1133	B	Software Developers, Systems Software	11.0401	Information Science/Studies
			11.0701	Computer Science
			14.0901	Computer Engineering, General
			11.0201	Computer Programming/Programmer, General
			14.0903	Computer Software Engineering
			11.0103	Information Technology
			11.0202	Computer Programming, Specific Applications
27-3042	B	Technical Writers	23.1303	Professional, Technical, Business, and Scientific Writing
			52.0501	Business/Corporate Communications
			09.0908	Technical and Scientific Communication

Charge 5 – Study and make recommendations on a new formula to fund dual credit programs based upon the number of semester credit hours offered in dual credit by Texas State Technical College. (General Appropriations Act, SB 1, 85th Texas Legislature, Rider 12 (page III-232))

No recommendation at this time.

Charge 6 – Review existing Coordinating Board data on dual credit program funding, including preliminary data available from the 2017-2018 dual credit study being conducted by contracted research organizations, and share insight on current dual credit funding mechanisms.

No recommendation at this time.

Dual Credit Enrollment

FY 2016 Exemptions ¹	College District	FY 2016 Dual Credit Contact Hour Appropriations ²	Fall 2015 (fall of FY 2016) Dual Credit Enrollment	FY 2016 Dual Credit SCH Fall + Spring + Summer ³
\$18.8 M	Alamo	\$5,044,875	10,395	108,271
\$653K	Alvin	\$714,973	1,385	18,360
\$1.2M	Amarillo	\$1,259,037	1,992	21,182
\$0	Angelina	\$694,046	1,517	16,215
\$10.9 M	Austin	\$2,644,615	5,236	67,778
\$180K	Blinn	\$642,352	1,502	14,129
\$0	Brazosport	\$534,068	1,038	11,379
\$0	Central Texas	\$455,340	1,476	14,628
\$0	Cisco	\$432,866	720	8,130
\$0	Clarendon	\$377	538	5,368
\$0	Coastal Bend	\$1,152,902	1,378	11,409
\$1.0M	College of the Mainland	\$737,704	1,205	14,249
\$185K	Collin	\$1,671,908	3,745	34,883
\$11.9M	Dallas	\$3,899,048	9,434	128,651
\$2.0M	Del Mar	\$1,748,946	1,823	24,928
\$9.1M	El Paso	\$3,710,541	6,095	80,643
\$0	Frank Phillips	\$223,677	706	9,154
\$119K	Galveston College	\$65,145	320	3,598
\$0	Grayson	\$226,882	929	8,930
\$0	Hill College	\$767,846	1,111	10,395
\$5.3M	Houston	\$3,495,146	5,250	68,453
\$585K	Howard	\$886,189	2,111	18,528
\$0	Kilgore	\$638,633	1,117	10,601
\$891K	Laredo	\$632,386	1,542	11,890
\$834K	Lee	\$674,562	1,328	15,003
\$5.8M	Lone Star	\$5,248,987	11,251	126,270
\$700K	McLennan	\$828,605	1,399	13,036
\$0	Midland	\$717,037	958	9,147
\$32K	Navarro	\$2,259,130	3,055	37,822
\$90K	North Central Texas	\$631,405	1,540	15,640
\$17K	Northeast Texas	\$286,285	123	3,865
\$0	Odessa College	\$1,394,448	1,586	16,730
\$0	Panola	\$332,950	570	6,600
\$367K	Paris	\$940,253	1,401	16,327
\$0	Ranger	\$458,586	781	9,118
\$3.0M	San Jacinto	\$1,917,446	3,179	41,056

FY 2016 Exemptions¹	College District	FY 2016 Dual Credit Contact Hour Appropriations²	Fall 2015 (fall of FY 2016) Dual Credit Enrollment	FY 2016 Dual Credit SCH Fall + Spring + Summer³
\$979K	South Plains	\$696,998	1,428	14,968
\$24.2M	South Texas	\$10,553,382	14,950	203,189
\$953K	Southwest Texas	\$853,722	1,626	17,463
\$0	Tarrant	\$2,730,197	6,494	71,860
\$0	Temple	\$625,910	946	12,995
\$0	Texarkana	\$792,066	1,471	14,465
\$571K	Texas Southmost	\$462,596	863	10,304
\$694K	Trinity Valley CC	\$902,754	2,015	25,972
\$290K	Tyler	\$831,963	104	1,876
\$442K	Vernon	\$213,916	525	5,045
\$0	Victoria	\$247,162	629	6,366
\$456K	Weatherford	\$637,292	1,151	11,235
\$31K	Western Texas	\$426,677	771	8,639
\$0	Wharton	\$361,819	1,184	9,349
	Total	\$68,305,648	123,893	1,446,092

Footnotes:

- 1 Integrated Fiscal Reporting System (IFRS) (Fall and Spring)
- 2 Contact hours from CBM times the appropriated rate, as determined by the cost study
- 3 Semester credit hours are for the most recent fiscal year, which are different from the base period semester credit hours.

This document is available on the Texas Higher Education Coordinating Board
Website: <http://www.thecb.state.tx.us/formulafunding>

For more information contact:

Roland Gilmore

Program Director

Strategic Planning and Funding

Texas Higher Education Coordinating Board

P.O. Box 12788

Austin, TX 78711

(512) 427-6243

roland.gilmore@thecb.state.tx.us